

Claims

1. A quick-acting valve (18) comprising a coil (19) supplied by a voltage source (25),

characterized in that

between the voltage source (25) and the coil (19) a voltage-dependent resistor (33) is provided, and an auxiliary voltage source (35) is connected in parallel to the coil (19), the voltage of said auxiliary voltage source (35) being opposite to that of said voltage source (25).

2. The quick-acting valve according to claim 1, characterized in that the auxiliary voltage source (35) comprises at least one Zener diode.
3. The quick-acting valve according to claim 1 or 2, characterized in that the auxiliary voltage source (35) is connected in series with a rectifier diode (36) and in parallel to the coil (19).
4. The quick-acting valve according to any one of claims 1-3, characterized in that the voltage-dependent resistor (33) includes a plurality of electronic switches (37,38,39) connected in series in the form of a cascade, said electronic switches (37,38,39) each bridging a series resistor (41) and being driven into the closing state when the voltage (U_e) applied falls below a given switching voltage (U_s).
5. The quick-acting valve according to claim 4, characterized in that the switching voltage (U_e) is determined by a reference voltage path (46).
6. The quick-acting valve according to claim 4 or 5, characterized in that each electronic switch (37,38,39) is switched by an auxiliary transistor (43,44,45).